SPECIAL WORKSHOP MEETING OF THE BOARD OF DIRECTORS
Southside Water and Sewer District
P.O. Box D, Sandpoint, Idaho 83864
May 8, 2024

Call to Order and roll call: Chairman Jack Howard opened the workshop meeting at the District Maintenance Shop at 12:00 pm and a roll call confirmed that Doug Bopp, Kass Larson, and Greg Keibler were also present.

Others: Treasurer Julia MacDonald and Operator Jason Barnhart, Keller Associates Levi McPhee and Kyle Meschko were also present.

Members of the Public: None present

NEW BUSINESS – ALL ITEMS ARE ACTION ITEMS

Water Systems Improvement Project: Tank PER - Review Meeting

Mr. Meschko provided a detailed meeting agenda and introduced the Preliminary Engineering Report for the water storage improvements and waterline project. The Board reviewed the cost estimates and discussed alternatives and Keller will provide a cost estimate for a vault and valve system as an alternative to the additional 8" line to the tank. The Board discussed backup power for the wells and electrical service to the storage tank site. Mr. Barnhart received a verbal estimate from Mr. Peterson at Avista to run conduit for the electrical service to the tank site. Chairman Howard will talk to the planning department regarding the Conditional Use Permit. Mr. Bopp asked about the most recent survey and Keller will double check the survey report.

KellerTank PER - Review meeting agenda and notes attached.

Adjournment: The Workshop was adjourned at 1:30 pm

Respectfully Submitted and Approved:

_____	_____
Julia MacDonald	Jack Howard
Treasurer/Administrator	Chairman of the Board

Tank PER - Review Meeting **Notes**

Project:	Phase 1 – Water System Improvements (Tank PER)	**Date:**	May 8, 2024		
Client:	Southside Water and Sewer District	**Project No:**	221081-004	**Meeting No:**	2

Attendees:

SWSD – **Kass, Doug, Julia, Jack, Greg, Jason**
Keller Associates – Kyle Meschko, Levi McPhee~~, Jackie Kittredge~~
Other Attendees –

Notes in **BOLD**

Action Items	
Keller	**SWSD**
- Check hydraulic capacity in the 6" waterline from the wells to Brisboy Rd. **- Send Bonner County code for the CUP to SWSD** **- Review the survey of the tank site** **Send funding requirements to SWSD**	**Follow up on CUP/discussion with County**

PROJECT OVERVIEW

1. **Preliminary Design Scope/Deliverables**
    a. Preliminary Engineering Report
        i. Provided to SWSD for review
        ii. **KA to update PER resend to District for final review/approval to submit to IDEQ.**
    b. Concept Drawings
        i. Preliminary site and mechanical layout for review and discussion
    c. Opinion of Probable Cost for Construction
        i. Included in PER, provided below for review
        ii. **Evaluate tank fill control valve options/cost**

Summary of Opinion of Probable Costs		
Project Name	**Project Description**	**Total Estimated Cost (2024 Dollars)**
New Water Storage Tank	New 100,000 gallon concrete tank	$940,000
Waterline to Tank	Approximately 1,000 LF of 8" waterline to connect the new tank	$413,000
	Total Project Cost	**$1,353,000**

The cost estimate herein is based on our perception of current conditions at the project location. This estimate reflects our professional opinion of accurate costs at this time and is subject to change as the project design matures. Keller Associates has no control over variances in the cost of labor, materials, equipment, services provided by others, contractor's methods of determining prices, competitive bidding or market conditions, practices or bidding strategies. Keller Associates cannot and does not warrant or guarantee that proposals, bids or actual construction costs will not vary from the costs presented herein.

KA discussed bidding a similar project in the coming months and will provided updated tank costs.

District wants to postpone waterline to tank and do possibly at a later time.

2. **Preliminary Design**
    a. Design Criteria
        i. WFP Tank Volume:
            1. 2034 total required storage per approved WFP: 304,730 gallons (includes 30,000 gallons of fire storage, 263,340 gallons of equalization storage, and 27,730 gallons of standby storage)
                a. WFP tank: 166,000 gallons
                b. Not using the storage criteria In the WFP for design due to past and future system improvements
        ii. Design Tank Volume:
            1. New 100,000-gallon tank to match the volume of the existing tank
                a. Retain existing 100,000-gallon water tank (200,000 gallons total storage)
                b. Keller's high level storage analysis based on increased firm pumping capacity
                    i. Improved production at the existing wells
                        1. ~ 220 gpm for the shallow well
                        2. ~ 300 gpm for the deep well
                    ii. Planned construction of a new well facility (~400 gpm) with backup power
                    iii. SWSD will be able to pump the MDD with the new well – **Per district Mountain Springs was included in the user demands which is not accurate so demands will likely be less than projects in the WFP.**
                        1. Results in less storage than determined in the WFP

Storage Summary	Existing 2024	Future 2044 With All Improvements
Operational Storage Volume (gal)	29,952	43,056
Equalization Storage (gal)	17,000	NA
Fire Suppression Storage (gal)[1]	30,000	30,000
Standby Storage Volume (gal)[2]	23,040	N/A
Total Storage Required	**77,000**	**73,056**
Total Storage Available	**100,000**	**200,000**
Storage Surplus / Deficit (gal)	23,000	126,944

1) Assumes fire flow (250 gpm for 2 hours).

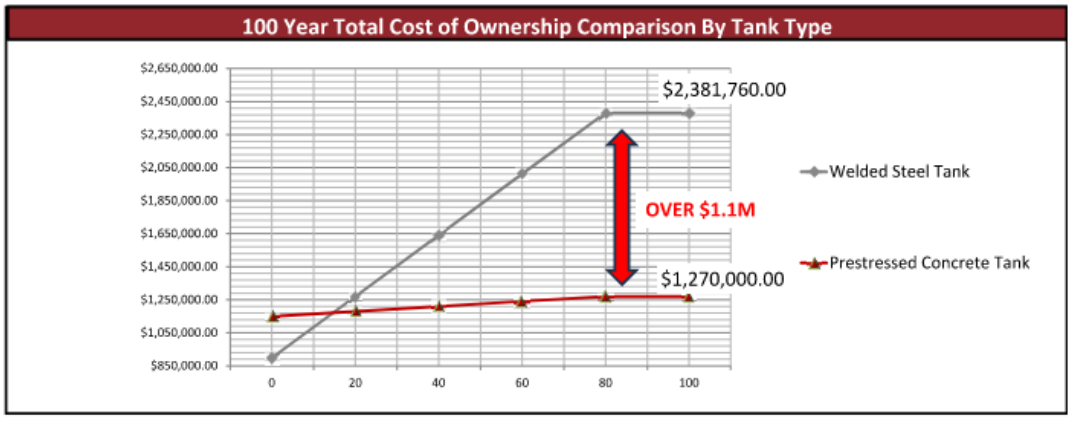
2) Equal to storage required to supply the average day demand for 8 hours if no backup power is provided.

b. Concept Drawings (see attached)
   i. Preliminary site layout
      1. Adjacent to existing tank
         a. Keller to review survey
      2. Zoning – Rural 5 (R-5): Conditional Use Permit required
         a. CUP process could take up to a year
         b. Keller to send SWSD the section of Bonner County Code
      3. Tank construction: Above grade
         a. 20-foot property line setback per IDEQ
         b. 25-foot property line setback per Bonner County
         c. Partially buried tank was determined to be infeasible due to the inability to satisfy the larger setback requirements
      4. Tank geometry: Rectangular
         a. Circular tank was evaluated but less likely to fit due to Bonner County setback requirements
      5. Easement for the existing tank
         a. 50-foot property line setback per IDEQ
      6. Swale with drywells for tank overflow/drain in the NW corner of the parcel
      7. Rock removal
         a. May have needed to blast for rock removal for the existing tank and waterline – add additional rock removal costs.
      8. New fencing/gate
   ii. New 8” distribution line
      1. Maintain existing 8” line
      2. Helps with short circuiting of the tank within the system
      3. Approximately 1,100 LF
         a. Isolation valving at the intersection

4. **Existing 6" from wells to Brisboy Rd.**
    a. **Keller to check hydraulic capacity of the waterline**
5. **Existing 8" from Brisboy Rd. to system/tank**
    a. **SWSD concerned with low pressures and fire flow at the east end of the district (pressure boosted Hawkins) – KA documented the WFP did not identify low pressure associated with existing tank HGL and more a function of the booster station pressure.**
        i. **Documented in the WFP**
        ii. **6" water line from wells to intersection to go to tank/dist. system**

iii. Mechanical/structural

1. Material: CIP concrete, per Water FPS **– SWSD would like to proceed with concrete**
    a. Steel also considered
        i. Fusion Bonded Epoxy Coated Carbon Steel capital costs – 28% less than concrete
        ii. Glass Fused to Steel capital costs – 12% more than concrete
        iii. Larger O&M costs for steel tanks



2. Overflow
    a. Elevation to match existing tank (approx. 2,269 feet) to avoid creation of new pressure zone and for consistency
3. Operation
    a. Existing tank has a common fill/draw
        i. Helps with short circuiting
    b. New 8" distribution line to act as the tank outlet
        i. New connection to the existing tank
    c. Existing waterline to act as the inlet
        i. New connection from the existing pipe to the new tank

iv. Electrical/controls

1. Transducers for both tanks -operate with wells being called on when tanks hit low level of operation.

~~2. Sufficient electrical service~~

3. **Need electrical service to the tank site – oversize for future planning KA to update PER**
    a. **Power Easement from the east for consideration with Avista**

3. **Funding**
    a. **Need to spend money by the end of 2026**
    b. **Summarize funding options/provisions needed to make up the ARPA deficit – Consider USDA-RD offsetting /funding tank const.**